Bl.

- b. a small, lightweight housing having an input end having an interior surface that defines a light guide opening and an output end having an interior surface that defines an illumination opening, the output end of the light guide extending within the light guide opening and being aligned so that light therefrom illuminates the illumination opening;
- c. only a single lens mounted within the interior surface of the output end of the housing, said lens being an aspheric lens thereby providing a light source of such weight and size that it may be mounted to headgear so that an illumination beam therefrom substantially corresponds to the user's line of sight; and
 - d. means for attaching the housing to the headgear.

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29 3þ. (AMENDED) The illumination assembly of Claim 29 wherein a binocular telescope is mounted on the eyeglasses and the attaching means is removably attached to the binocular telescope as that the housing is substantially coaxial with the line of sight of the telescope.

B3 c3/

-33. (AMENDED) The illumination assembly of Claims 21 or 22 wherein

the aspheric lens has a diameter of less than 2 centimeters.

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said lens include an aspheric face and an opposing planar face, the lens being

54. (NEW) An illumination assembly for dental and medical application comprising:

- a. a lightweight, flexible light guide having an input end and an output end, the input end being adapted for connection to a remote illumination source;
- b. a small, lightweight housing having an input end having an interior surface that defines a light guide opening and an output end having an interior surface that defines an illumination opening, the output end of the light guide extending within the light guide opening and being aligned so that light therefrom illuminates the illumination opening;
- c. only a single lens mounted within the interior surface of the output end of the housing, thereby providing a light source of such weight and size that it may be mounted to headgear so that an illumination beam therefrom substantially corresponds to the user's line of sight; and
 - d means for attaching the housing to the headgear.

55. (NEW) An illumination assembly for dental and medical applications comprising:

a. a lightweight, flexible fiberoptic bundle including several optical cables and having an input end and an output end, the input end being adapted for connection to a remote illumination source;

B5

- b. a small, light weight housing including an input end having an interior surface that defines a light guide opening and an output end having an interior surface that defines an illumination opening, the output end of the fiberoptic bundle extending within the light guide opening and being aligned so that light therefrom illuminates the illumination opening.
- c. only a single lens mounted within the interior surface of the out-put
 end of the housing, thereby providing a light source of such weight and size that it may
 be mounted to headgear so that an illumination beam therefrom substantially
 corresponds to the user's line of sight; and
 - d means for attaching the housing to the headgear.

56. (NEW) An illumination assembly comprising:

- a. a light guide having an output end an input end, the input end being adapted for connection to a remote illumination source;
- b. a housing having a light guide opening and an illumination opening, the output end of the light guide extending within the housing and being aligned illuminate the illumination opening;
- c. only a single optical element, the single optical element being mounted within the housing; and
 - d. attachment means for removably attaching the housing to the

<u>þéadgear.</u>